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# Food Safety for the Family

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**F**ood poisoning is the great master of disguise. You could be up half the night with an upset stomach, headache, and nausea and think that you've caught a "flu bug" or virus that's going around. But that may not be the case.

A lot of people get the flu. But a lot of people who think they have the flu are really suffering from a mild case of food poisoning, caused by tiny organisms called bacteria. If you are sick for more than a day, check with a doctor. There probably isn't much you can do to prevent the flu. But you can prevent food poisoning.

## **YOU CAN PREVENT FOOD POISONING!**

Preventing food poisoning starts when you buy food at the supermarket. You then have to keep working to prevent food poisoning as you store, prepare, cook, and serve food at home. Food poisoning prevention can be broken down into three simple rules: Keep food hot, keep food cold, keep food clean.

### **KEEP FOOD HOT**

Germs that cause food poisoning are generally killed when you boil, broil, or roast foods. However, when food stays at room temperature for longer than 2 hours, some bacteria may start to multiply. Some organisms even produce poisons that are not destroyed by heating and cause food poisoning. So, once food is cooked, keep it hot until served, and refrigerate leftovers at once. Remember, germs seldom change the taste, odor, or appearance of food.

Here are some tips to prevent food poisoning while cooking meat and poultry:

- Allow frozen products more time to cook. You generally need to cook an unthawed product one and one half times longer than thawed product.
- Cover leftovers to retain moisture. Reheat all the way through. Bring gravies to rolling boil.
- Insert a *meat thermometer* into thickest part of meat—should not be in the fat or touch the bone. For poultry, insert thermometer into the thick part of the thigh next to body of bird.

## **COOK TO TEMPERATURE SHOWN**

(Thermometer Inserted Into Meat)

FRESH BEEF	Celsius	Fahrenheit
Rare	60	140
Medium	71	160
Well Done	77	170
FRESH VEAL	77	170
FRESH LAMB		
Medium	77	170
Well Done	82	180
FRESH PORK	77	170
CURED PORK		
Ham, Raw		
(Cook before eating)	71	160
Ham, Fully cooked		
(Heat before serving)	60	140
Shoulder		
(Cook before eating)	77	170
POULTRY		
Turkey	82-85	180-185
Boneless		
Turkey Roasts	77-80	170-175
Stuffing		
(Inside or outside the bird)	74	165

## **KEEP FOOD COLD**

Germs don't multiply very fast if the storage temperature is 5 degrees Celsius (40 degrees Fahrenheit) or below. So, store meat, poultry, eggs, milk, cheese, and other perishables in the refrigerator. Here are some tips on how to safely store meat and poultry.

- Meat and poultry may be stored as purchased in plastic wrap for a day or two. For longer storage time, remove from store wrapping and wrap very loosely in wax paper or plastic wrap. The refrigerator temperature should be set to 5 degrees Celsius (40 degrees Fahrenheit). Use a thermometer to check your setting.*

- To store in a freezer, wrap meat and poultry tightly in freezer paper, plastic wrap, or foil and place in the freezer. Put the newest items in the back or bottom of freezer and the old ones at the top or front. Date the packages and use the oldest first. The freezer temperature should be -18 degrees Celsius (0 degrees Fahrenheit).
- Cover meat and poultry leftovers and store in refrigerator. Use in 2 days. Use covered container or wrap tightly to store in freezer. Keep in mind that warm leftovers will raise the interior temperature of the refrigerator somewhat.
- Read the label of canned meat and poultry; refrigerate if necessary. Otherwise store in cool, dry place. Use within 1 year. Date the cans.
- In preparing meat and poultry salads, make sure that all ingredients are thoroughly chilled. After mixing, place in shallow containers that will allow the heat gained during mixing to be removed quickly. Place in refrigerator.

The best way to thaw meat and poultry is in the refrigerator. However, meat and poultry may be thawed outside the refrigerator by putting them in a sealed plastic bag and placing the bag in a container of cold water. Change the water frequently in order to keep it cold. Or, place on a tray in a double brown grocery bag and leave at room temperature. Double bags provide insulation and allow even thawing to occur (1 pound per hour).

At the supermarket, always pick up meat, poultry, and dairy products last, and get them home and into the refrigerator or freezer quickly. Don't leave them in the car trunk on a warm day while you do other errands. If these products get too warm, food organisms may have a chance to multiply to dangerous levels and food poisoning can occur.

## KEEP FOOD CLEAN

Keep germs off meat, poultry, and dairy products by washing utensils, platters, and countertops with soap and hot water before and after touching raw meat and poultry. Be careful not to spread germs from raw meat to cooked meat through cross-contamination. Wash utensils and platters after they have come into contact with raw meat and poultry and before they touch any cooked product. The same goes for your hands—or rubber gloves.

Germs are a natural part of the environment, so you need to be careful to keep things clean—especially your hands. Be sure to bandage cuts and sores before you handle food. Keep pets out of areas

where food is prepared in the kitchen. Also teach children to wash their hands before handling food.

Using these three rules—Keep food HOT, Keep food COLD, Keep food CLEAN—can keep your family safe from nearly all food poisoning. However, there are a few other things you need to keep in mind about some kinds of foods.



## **HAMBURGER**

Ground meat must be handled carefully and cooked until it is at least brownish-pink in the center. Never serve raw. Ground meat requires special care because when it is ground, germs on the surface are spread throughout the meat.

## **HAM**

Know what kinds of ham you've bought. Some need to be cooked; others are fully cooked and can be eaten as they come from the package. Check the label, and if you have any doubts—cook the ham.



## TURKEY, CHICKEN, AND DUCK STUFFINGS

Cook poultry products completely. If you prepare the turkey, chicken, or duck the day before you plan to cook it, store it in the refrigerator. Store giblets separately. This rule also applies to stuffings. Always stuff the bird right before roasting. If the bird is stuffed, stuff loosely to allow heat penetration. Refrigerate leftover poultry and stuffing in separate dishes—within two hours.



## HOT DOGS AND LUNCH MEATS

These products should be stored in the refrigerator. Don't treat them as though they can't have food poisoning germs—they can!

Unopened vacuum-sealed packages of lunch meats may be kept in the refrigerator for 2 weeks. Once opened, wrap well and use within 3-5 days. Store frankfurters in their original packages, and for best flavor use no later than one week after the "sell by" date printed on the package.

## **EGGS AND EGG-RICH-FOODS**

Use only clean, unbroken, odor-free eggs any time eggs are not going to be thoroughly cooked, such as in soft-cooked eggs, poached eggs, scrambled eggs, omelets, uncooked salad dressings, ice cream, or soft custard. Cracked or soiled eggs can contain harmful bacteria, and should be used only in recipes that call for thorough cooking, such as hard-boiled eggs, baked goods, and casseroles. Hot foods with a high egg content should be served hot. Egg-rich foods which are to be served cold should be refrigerated as soon as possible, and should remain refrigerated until serving time.





## CANNED FOODS

Do not buy or use food from containers with these faults: leaking, bulging, or severely dented or damaged cans; cracked jars or jars with loose or bulging lids. Do not taste or use food that has a foul odor or any food that spurts liquid when the can is opened. These foods could contain the rare but often fatal botulinal toxin. Botulism can occur in improperly home-canned foods or in commercial products; therefore, care must be taken with either type if containers appear to be faulty.

If you do can your own food, always can vegetables, meat, or poultry in a pressure canner. A boiling water bath, an oven, a steamer, or an open kettle will not heat products enough to kill the bacteria that cause botulism. However, tomatoes, pickled vegetables, and fruits can be processed safely in a boiling water bath because they contain a higher acid level than do the other products. But don't use overripe tomatoes for canning, since tomatoes lose acidity as they ripen.

Always follow canning directions carefully, and take each step in order. Do not take shortcuts. Make sure your equipment is in good working order. Always use fresh products and keep meat and poultry stored in the refrigerator or freezer before canning. Safely thaw frozen food before canning. Boil the vegetables for at least 10 minutes before eating. Boil spinach, corn, meat, or poultry for at least 20 minutes. Destroy any food that foams, or looks or smells spoiled.

## **WHAT TO DO WHEN THE FREEZER FAILS**

Once you learn how to properly store food, your freezer can be like a faithful friend. But what happens when it breaks down or the power goes out? Try to find out how long it will be before your freezer is working again. Keep the freezer door closed. Don't keep opening and closing it to "check on the food." A fully loaded freezer will stay cold enough to keep food frozen for 2 days. A half-full freezer will only keep food cold for a day. Meats that still contain ice crystals or have been maintained at 5 degrees Celsius (40 degrees Fahrenheit) or below for less than 2 days may be safely refrozen. Some quality may be lost, but the product is still wholesome. Throw out any food that has an unusual color or odor. Never refreeze ice cream.

If it looks like the power will be off for a long time or your freezer won't be repaired for a while, use dry ice. If dry ice is placed in the freezer soon after the power goes off, 25 pounds should keep the temperature below freezing for 2 to 3 days in a 10-cubic-foot, half-full freezer and 3 to 4 days in a full freezer of the same size.

Handle dry ice carefully. Be sure the room is well ventilated, and never touch dry ice with your bare hands. Place the dry ice on cardboard or small boards on top of packages, and do not open the freezer again except to put in more dry ice or to remove it when your freezer is working again.

If using dry ice is not possible, move food to a food locker. Carry it to the locker in insulated boxes or thick layers of paper to prevent thawing. Or possibly a neighbor may be willing to store some of your food until your freezer is working.



## SOURCES OF FOOD POISONING

Several different kinds of germs (bacteria) can cause food poisoning. A group of them called *Salmonella*, are normally found in warm-blooded animals—cattle, poultry, swine, and so on. These germs may be found in raw meat, poultry, eggs, or dairy products. These same foods, as well as vegetables and other crops that come in contact with the soil (such as herbs), may be the source of a bacterium called *Clostridium perfringens*. Growth of this organism may occur when foods such as stews, soups, or gravies are stored improperly or left at room temperature for long periods of time. *Staphylococci*, or *Staph* organisms, occur normally on human skin and in the nose and throat. These germs can be transmitted to food when handled; therefore, anyone infected with *Staph* should not prepare food. When custards or salads containing meat, poultry, potatoes, or eggs are kept under improper temperature conditions, and *Staphylococci* are present, growth to unsafe numbers may occur and produce a toxin that causes food poisoning.

Botulism is a rare but deadly kind of food poisoning. The bacteria which cause it, *Clostridium botulinum*, are found naturally almost everywhere—including soil and water. They become dangerous when they are triggered to multiply and produce their poison. Low-acid foods—such as meat, poultry, green beans, beets, or corn—which are improperly canned can be breeding grounds for this bacteria. More incidents of botulism are due to products canned improperly at home than those manufactured by industry. But care should be taken in either case. Throw away any severely dented, swollen, or burst can, or any cracked or broken jar—these could be indications that the botulism organism is present.

# **REMEMBER THE RULES**

Remember three key rules: Keep food hot. Keep food cold. Keep food clean. Under most circumstances, following these rules, coupled with the exercise of good common sense, will protect you from food poisoning.

But if you do get sick, see your doctor. Think about how you stored, cooked, and served your food the last few days. If you believe the problem came from outside your home, call your local health authorities.

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## **Other Food Safety Publications (English and Spanish)**

Safe Brown Bag Lunches

Holiday Food Safety

Summertime Food Safety

Food-Borne Bacterial Poisoning (English only)

How to Fight the Food Spoilers (mini-poster)

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